

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-16. (cancelled).

Claim 17. (currently amended) A method of detecting a clog jammed in a pipe, comprising:

moving a capacitive proximity switch along the length of a pipe wherein a clog is jammed at an unknown location so as to sense ~~sensing~~ whether a capacitance within a pipe is changed; and

outputting an alarm signal to inform the location of the clog in the pipe when the capacitance has changed.

Claim 18. (previously presented) The method as claimed in claim 17, further comprising a step of outputting an enable signal to enable an alarm device to output the alarm signal.

Claim 19. (previously presented) The method as claimed in claim 17, wherein the alarm signal is output to turn on a light emission diode or a buzzer to inform the location of the clog in the pipe.

Claim 20-22. (cancelled)

Claim 23. (currently amended) A portable pipe clog detector, comprising:

a portable casing;

a power supply unit disposed in the casing;

a capacitive proximity switch coupled to the power supply unit ~~to sense whether a capacitance within a pipe is changed and to output an enable signal when the capacitance has changed;~~ and provided for being moved along the length of a pipe

wherein a clog is jammed at an unknown location so as to sense whether a capacitance within the pipe is changed and for outputting an enable signal when the capacitance has changed; and

an alarm device coupled to the capacitive proximity switch to output an alarm signal after receiving the enable signal, wherein the location of ~~a~~the clog in the pipe is identified by the alarm signal.

Claim 24. (previously presented) The portable pipe clog detector as claimed in claim 23, wherein the alarm signal device is a buzzer.

Claim 25. (previously presented) The portable pipe clog detector as claimed in claim 23, wherein the alarm signal device is a light emission device.

Claim 26. (previously presented) The portable pipe clog detector as claimed in claim 25, further comprising a resistor coupled to the light emission device to limit a current flowing through the light emission device.

Claim 27. (previously presented) The portable pipe clog detector as claimed in claim 26, wherein the light emission device is a light emission diode.

Claim 28. (previously presented) The portable pipe clog detector as claimed in claim 23, wherein the power supply unit is a battery set.

Claim 29. (currently amended) A portable pipe clog detector, comprising:

a portable casing;

a battery set deposited in the portable casing;

a capacitive proximity switch coupled to the battery set ~~to sense whether a capacitance within a pipe is changed and to output an enable signal when the capacitance has changed and~~ provided for being moved along the length of a pipe wherein a clog is jammed at an unknown location so as to sense whether a capacitance

within the pipe is changed and for outputting an enable signal when the capacitance has changed; and;

a light emission diode coupled to the capacitive proximity switch to illuminate after receiving the enable signal;

a buzzer coupled to the capacitive proximity switch to sound after receiving the enable signal, wherein the location of ~~a~~the clog in the pipe is identified by illumination of the light emission diode and sound of the buzzer;

a resistor coupled to the light emission diode to limit a current flowing through the light emission diode; and

a switch coupled to the battery set to control a electrical conduction between the battery set and the capacitive proximity switch.

Claim 30. (new) The method as claimed in claim 17, wherein the pipe is a nontransparent pipe.

Claim 31. (new) The method as claimed in claim 30, wherein the alarm signal is output to turn on a light emitting diode or a buzzer to inform of the location of the clog jammed in the nontransparent pipe.